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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,154	12/30/2003	Oliver J. Young	04457 (3883.00040)	7840
35374	7590	10/03/2005	EXAMINER	
LEAR CORPORATION, BLISS MCGLYNN, P.C. 2075 WEST BIG BEAVER ROAD SUITE 600 TROY, MI 48084			LAI, ANNE VIET NGA	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/749,154

Applicant(s)

YOUNG ET AL.

Examiner

Anne V. Lai

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/7/05 and 5/21/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "42" has been used to designate different elements in figure 1 of the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1- 6 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by **Hayes et al** [US. 6,932,382].

In claim 1, **Hayes et al** disclose a vehicle occupant sensing system for detecting condition of a vehicle seat (fig. 1) comprising: a circuit carrier 22 (flexible printed circuit mat; figs. 2-3); a plurality of leads 32 (figs. 2); a sensor 46 (sensor assemblies 26) having a body and being supported at the bottom by the circuit carrier, the sensor having a plurality of formed terminals (78; figs. 7-8) spaced away at predetermined distance from a plane defined by the bottom surface of the sensor body; a plurality of conductive connectors 94 (fig. 8) associated with corresponding formed terminals 78 and leads 32, the conductive connectors 94 operatively supporting the terminals 78 and establishing electrical connection between terminals and leads (col. 5, line 51- col. 6, line 33).

In claims 2 and 3, **Hayes et al** disclose the conductive connectors 94 include at least a deformable blade 98 (figs. 12-14) that pierces through the circuit carrier 22 and being deformed outward and upward to form a mechanical and electrical connection with individual ones of the electrical leads 32 in the circuit carrier (the first, second and third portions of the blade are inherent) (col. 5, line 51- col. 6, line 33).

In claim 4, **Hayes et al** disclose conductive connectors 94 (figs. 4-5, 7-8, 11-14) include a body supported on the upper surface of the circuit carrier 22 and a top end spaced away for the upper surface of the circuit carrier; the formed terminals 78 are supported by the top end of corresponding conductive connectors 94.

In claim 5, **Hayes et al** disclose the formed terminals 78 have a predetermined Y-axis spacing corresponding to Y-axis spacing of electric circuit leads (fig. 8).

In claim 6, **Hayes et al** disclose the sensor 46 has a plurality of outer-formed terminals 78 having Y-axis bend at predetermined location (fig. 8).

In claim 7-12, **Hayes et al** disclose the claimed method of assembling a vehicle occupant sensing system of claims 1-6 above comprising: forming terminals spaced a predetermined distance away from a plane defined by the bottom surface of the body; electrically attaching conductive connectors 94 to corresponding leads 32; electrically attaching sensor's terminals 78 to corresponding conductive connectors 94 (col. 5, line 51 – col. 6, line 33).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hayes et al**.

In claims 13-18, **Hayes et al** disclose any suitable method of electrically connecting the terminals 78 of the sensor to electrical leads 32 of the printed circuit mat 22 could be provided (col. 6, lines 20-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, attaching the connectors to the leads before attaching sensor's terminals to the connectors (applicant's claim 7, steps b and c) or attaching the sensor's terminals to the connectors before attaching the connectors to the leads (claim 13, steps b and c) is merely a designer choice.

**Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Lolito et al** disclose a weight sensor for vehicular safety restraint system. [US. 6,129,168]

**Young et al** disclose a vehicle occupant sensing system and method of electrically attaching a sensor to an electrical circuit. [US. 2004/0262958]

**Saunders et al** disclose method and apparatus for sensing seat occupancy. [US. 2003/0220766]

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 8:00 am to 5:30 pm, Monday to Thursday.

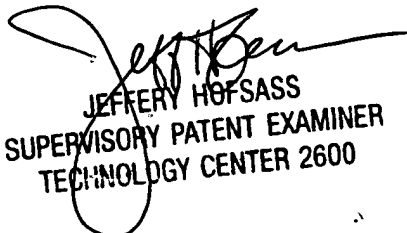
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*AVL*  
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September 26, 2005

  
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